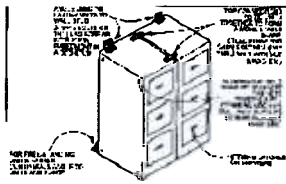


9. Securing Tall File Cabinets

If your file cabinets are against a wall, use

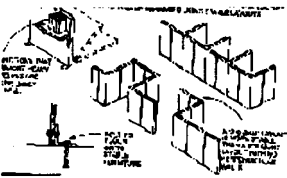


anchor brackets to secure the cabinets to wall studs. If the units are free standing, use anchor bolts to secure the file cabinets to the floor.

Use top connectors or bolts to tie tall file cabinets to each other. Install strong latches on the drawers, this should keep the drawers from flying open and spilling valuable papers or files all over the working area.

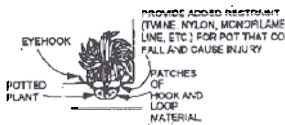
10. Freestanding wall partitions

Freestanding partitions may tip over unless they are anchored to the floor or attached to stable furniture such as desks. Using stable work layouts also reduces the risk of partitions falling over on workers during an earthquake. See the diagram below.

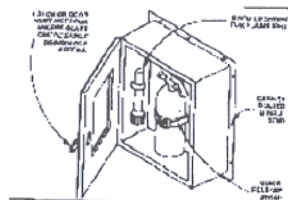


11. Securing Large Potted Plants

Similar to securing your electronic equipment, use double sided sticky Velcro on the bottom of the pot, the tables, floor or window areas where you normally keep your large potted plants. As an added protection to keep the pot from tipping over, wrap nylon or monofilament line around the largest part of the pot and secure the line to eye hooks embedded into the wall. The cost should be negligible.



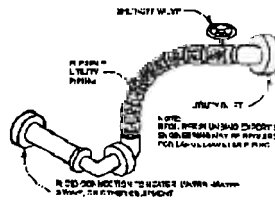
12. Secure the Fire Extinguisher in a Cabinet



Use a quick release strap to secure a fire extinguisher and a flashlight inside a metal cabinet with a glassed door. These cabinets are designed

to house the fire extinguisher and flashlight -- remember the cabinet should be secured to the wall studs. The cabinet housing might cost as much as \$300 depending on where you live.

13. Install a Flexible Connector Water Heater or Gas Lines

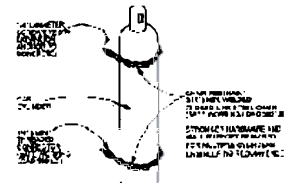


Flexible utility piping and a shut-off valve can be found in plumbing sections of hardware stores. This flexible piping can be secured to the rigid connector. The safety

valve allows the business owner to shut off the gas at the utility inlet connector. The cost will depend on the size of the connectors; obviously the cost will increase if the business is manufacturing.

14. Securing Compress Gas Cylinders

To do this project, you will need 1/4" diameter screw eye bolts or expansion anchors which will go into concrete. You will also need a 1/4" threaded connector (safe working load 500 lbs), and a minimum 3/16" closed-linked steel chain (safe working load 500 lbs). Remember if you are securing multiple gas cylinders, you will need stronger hardware, wall supports and engineering recommendations may be required as well.



Earthquake Office Improvements

A Toolbox of Earthquake Mitigation Tips You Can Do Yourself To Protect Your Office



For More Information Contact:
Earthquake Program
Missouri State Emergency Management Agency
P. O. Box 116
Jefferson City, MO 65102-0116
e-mail: mosema@mail.state.mo.us

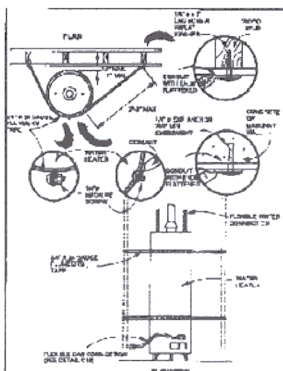
1. Save Your Windows

The next time the one of your display or office windows needs replacing, consider replacing the glass with tempered glass. Tempered glass may still break during an earthquake; but it will break into small dull fragments instead of large dangerous shards.

Another alternative is to put polyester shatter resistant films on all your windows. The film will help hold together glass fragments of any panes that crack in an earthquake. (Typical solar film may not be adequate for this purpose.)

2. Strap Your Water Heater to the Walls

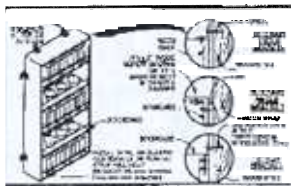
Strapping your water heater to the wall is one mitigation item every business owner can do himself. Here are two different diagrams for strapping your water heater to the wall - the first diagram is a corner location and may cost about \$80 to complete this office improvement. The second diagram shows how to strap your water heater to the wall - this may cost about \$200 dollars.



3. Secure Bookcases, Tall Shelving Units or Display Cases to the Wall

The business owner needs angle brackets to secure the bookcase or tall shelving units to wall studs or to the floor. Metal wires or elastic guardrails may help keep books and trophies etc

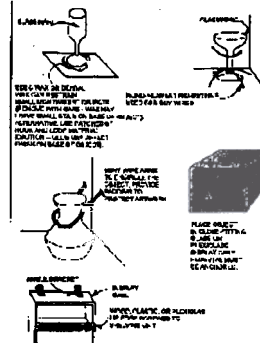
from falling out of the unit. REMEMBER keep



heavy items off the top shelves especially if the unit is located close to a desk or reception area. Depending on the number of bookcases or display cases, the cost may run as high as \$50 per unit.

4. Saving Fragile Sculptures and Trophies

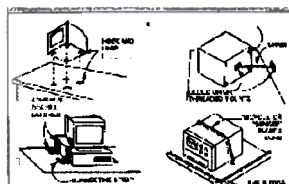
Fragile pottery or glass sculptures may be secured to a shelf with either bee's wax on the bottom of the vase/sculpture or double-sided sticky Velcro. If you don't like the idea bee's wax, you might try monofilament fishing line or fine wire wrapped around the sculpture or trophies and secured to the back of the bookcase wall. A third option, might be to build a close-fitting clear plexiglass display case - but remember to anchor the object inside the display case. Instead of wire or elastic bands across the shelves, a business owner might make a plexiglass lip which can be screwed into the shelving unit.



5. Computers & Electronic Equipment

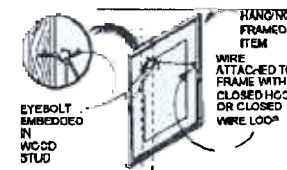
Double sided sticky Velcro to the rescue! Along with connecting straps, "bungee" elastic cords, rubber "doorknob bumpers, and a chain to

secure the equipment to a wall. Your computer and electronic equipment can be secured to a desk with double sided sticky Velcro or a bungee cord; a chain would secure the equipment to a nearby wall. Connecting straps may be used to secure stacked electronic equipment i.e. a computer monitor on top of a processor. The cost may run as much as \$50 per unit depending on how you wish to secure your computer/electronic equipment.



6. Framed Photographs, or Artwork

Every business owner can protect framed photographs and artwork. You need to make sure that a closed hook or a closed wire loop is secured to the back of the

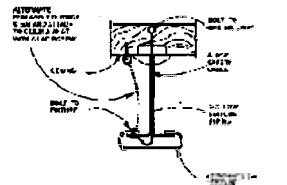


frame. Use an eye bolt embedded into a wood stud to secure your photos and artwork to the wall. Depending on the numbers of framed photographs and artwork, this improvement might cost as much as \$50.

7. Securing Pendant Light Fixtures

First make sure the light fixtures are bolted into ceiling joists. By following the diagram, you should install safety

cable through the hollow tubing to the pendant light fixture. As an added safety feature, run a cable from the bolt on the



outside of the fixture to the ceiling.

8. Securing Suspended Light Fixtures

Using 12 gauge wire, you will need to secure each corner of the fixture to ceiling joists. Take additional wire and wrap it around the light bulbs inside the fixture to keep the bulbs from shaking loose or breaking on the floor during an earthquake. See the diagram below.

